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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,797	02/07/2002	Jeffrey Rodman	PA1094US	3595
29855	7590	03/28/2006	EXAMINER	
WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI, P.C. 20333 SH 249 SUITE 600 HOUSTON, TX 77070			SCHUBERT, KEVIN R	
			ART UNIT	PAPER NUMBER
			2137	

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/072,797	Applicant(s) RODMAN ET AL.	
	Examiner Kevin Schubert	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01312006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-20 have been considered.

Continued Examination Under 37 CFR 1.114

5 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/31/06 has been entered.

Claim Rejections - 35 USC § 103

10 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20 Claims 1,4-6,8-10, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clough, U.S. Patent Application Publication No. 2003/0054766, in view of Schneier, (Schneier, Bruce. Applied Cryptography. John Wiley & Sons. 1996. Washington D.C. pages 31-36 and 176-183).

25 As per claims 1,10, and 20, the applicant describes a method for secure data transfer comprising the following limitations which are met by Clough in view of Schneier:

a) generating an encryption key within a first device of the communication system (Schneier: page 33);

b) encoding the encryption key to form an encoded signal (Schneier: page 33);

30 c) transmitting the encoded signal to a second device of the communication system remote from the first device (Schneier: page 33);

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d) decoding the encoded signal at the second device to extract the encryption key (Schneier: page 33);

e) using the encryption key to encrypt and decrypt data for subsequent wireless transmissions between the first and second devices (Schneier: page 33);

5 f) wherein the first device and the second device are co-located (Clough: [0012]);

Clough discloses a method for secure data transfer. In this method, a first device and a second device, which are co-located, communicate via wireless transmission. Further, in order to create a secure channel may utilize a secure communication technique. Clough, however, is silent as to a key-encrypting-key secure communication technique as described in the claimed invention.

10 Schneier discloses the well-known secure communication technique of session key exchange. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Schneier with those of Clough and utilize a session key exchange because doing so provides an effective means to create a secure communication channel.

15 As per claim 4, the applicant describes the method of claim 1, which is met by Clough in view of Schneier, with the following limitation which is also met by Clough:

Wherein the encoded signal is an infrared signal (Clough: [0013]).

20 As per claims 5, 16, and 17, the applicant discloses the limitations of claims 1 and 10, which are met by Clough in view of Schneier, with the following limitation which is also met by Schneier:

Further comprising an encryption/decryption module in the first and second devices for encrypting data for transmission and decrypting data received from the other device (Schneier: page 33).

25 As per claims 6 and 9, the applicant describes the method of claim 1, which is met by Clough in view of Schneier, with the following limitation which is also met by Schneier:

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Wherein the step of decoding further comprises the step of performing error detection to determine if an error has occurred in connection with the reception of decoding of the encryption key (Schneier: page 178).

5 As per claims 8,18, and 19, the applicant describes the method of claims 1,10, and 18, which are met by Clough in view of Schneier, with the following limitation which is also met by Clough:

Wherein the step of using the encryption key to encrypt and decrypt subsequent wireless transmissions further comprises the step of encoding the data into radio frequency signals (Clough: [0013]).

10 Claims 2-3 and 11-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Clough in view of Schneier in further view of Stein, U.S. Patent No. 6,297,892.

As per claims 2 and 3, the applicant describes the method of claim 1, which is met by Clough in view of Schneier, with the following limitation which is met by Stein:

Wherein the acoustic signal is DTMF tones (Stein: Col 3, lines 45-53);

Clough in view of Schneier discloses all the limitations of claim 1. However, Clough in view of Schneier is silent as to data being transmitted via DTMF tones. Stein discloses a method of securely transmitting data in which encrypted data is transmitted between two entities as DTMF tones.

20 It would have been obvious to one of ordinary skill in the art at the time the invention was filed to incorporate the ideas of Stein with those of Clough in view of Schneier because sending encrypted data as DTMF tones is an efficient way to pass data in transmission/reception systems which operate on DTMF frequencies.

25 As per claims 11-15, the applicant describes the system of claim 10, which is met by Clough in view of Schneier, with the following limitation which is met by Stein:

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clough in view of Schneider in further view of Doberstein, 5,809,148.

Further comprising the step of sending a request for retransmission of the encoded signal if an error is detected (Doberstein: Col 3, lines 3-19);

Clough in view of Schneier discloses all the limitations of claim 6. However, Clough in view of Schneier does not disclose sending a request for retransmission of a signal if an error is detected. Doberstein discloses a system in which a request for retransmission of a signal comprising encrypted data is sent to the sender of the data if an error is detected. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Doberstein with those of Clough in view of Schneier because doing so allows the system to make a request for retransmission of data so that the encryption key can still be built even if data is initially not received properly.

Response to Arguments

Applicant's arguments with respect to the 102(b) rejection of claims 1, 10, and 20 under *Schneider* have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application
5 Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10

KS


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER